# (19) World Intellectual Property Organization

International Bureau



# 

#### (43) International Publication Date 9 June 2005 (09.06.2005)

## PCT

# (10) International Publication Number WO 2005/052277 A2

(51) International Patent Classification7:

E04F

(21) International Application Number:

PCT/US2004/039247

(22) International Filing Date:

19 November 2004 (19.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

W 114468 P 370968 19 November 2003 (19.11.2003) PI 4 November 2004 (04.11.2004) PI

(71) Applicant and
(72) Inventor: GALAS, Adam [US/PL]; ul. Ciolkowskiego
11/5, PL-15-245 Bialystok (PL).

(74) Agents: MORELLA, Timothy et al.; Neal, Gerber & Eisenberg LLP, 2 North LaSalle Street, Chicago, Illinois 60602 3801 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Declaration under Rule 4.17:

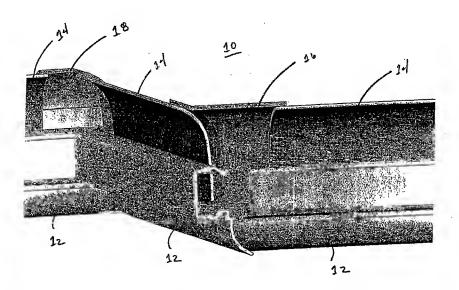
- of inventorship (Rule 4.17(iv)) for US only

#### Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SKIRTING BOARD



(57) Abstract: A skirting board comprising a base profile and a guard profile. The base profile comprises a receiving portion and a deflecting arm. The guard profile comprises a protruding portion, that interfaces with the receiving portion of the base profile, and a curved portion. The guard profile combines with the base profile to provide at least one open space. Finally, the deflecting arm and the curved portion combine to provide a surface used to finish a corner produced by a floor and a wall.

2005/052277 A2

# **SKIRTING BOARD**

#### FIELD OF THE PRESENT INVENTION

The Present Invention relates generally to baseboards and, in particular, to baseboards for use in finishing work indoors in an effort to both provide an aesthetically-pleasing appearance, as well as to provide a means by which a user may install such a baseboard and to provide a means by which a user may guide wires and the like.

10

15

20

25

30

5

#### BACKGROUND OF THE INVENTION

The description of the references, if any, cited in this Section is not intended to constitute an admission that any reference cited herein is "Prior Art" with respect to the Present Invention, unless designated as such.

It is known that a baseboard may comprise, generally, a skirt and a guard element. In such cases, the guard skirt is fixed to a wall and provided with longitudinal guiding projections. These guiding projections interface with elastic longitudinal projections of the guard element.

Specifically, from the description of Polish Utility Model Patent No. W-114468, the contents of which are hereby incorporated herein in their entirety, it is known a skirting board structure comprising an open base profile and a guard profile to be set in it by means of two webs. The guard profile of this skirting has two guard arms having different length. The open base profile is trapezial shaped in cross-sectional view. The base profile has a narrowing at the outer edge being limited by two oblique surfaces and an outwardly deflected arm. A long arm of the guard profile is placed in one line with the outwardly deflected profile and is its extension. On the inner side, the guard profile is provided with two deviated settlement webs having bulges on outer walls and being interrelated to the shaped edges of the base profile.

Further, the description of Polish Protective Right No. 60484, the contents of which are hereby incorporated herein in their entirety, presents a structure of a

skirting board which comprises two longitudinal elements being separately connected and corner joint elements. The joint elements comprise several portions which require an appropriate connection while assembling, wherein assembly or disassembly of the corner elements requires a longitudinal displacement of the longitudinal skirting elements, which considerably complicate assembling operations.

Thus, a need exists for a skirting board which overcomes the above-stated disadvantages.

#### 10 SUMMARY OF THE PRESENT INVENTION

15

20

25

30

One object of the Present Invention relates to a skirting board used to finish the aesthetics of a wall, and the construction thereof, to finish the aesthetics of a corner produced by a floor and wall, to finish the aesthetics of corner portions, and to provide a means to carry and dispose cables, wires and the like.

Another object of the Present Invention is a skirting system and more particularly a skirting board system, advantageously made of plastics material. Skirting of that type is used in particular for the protection of edges of building elements and as a guard of varied conduits arranged along the walls.

Another object of the Present Invention is a skirting system, in particular a skirting board system comprising a longitudinal skirting and joint elements. The longitudinal skirting consists of two separately connected longitudinal elements, and the joint elements are provided on the inner side with projections.

The gist of the Present Invention consists therein that a lower section having an expansion channel and a lower profile arm constitutes one of the longitudinal skirting elements. The second element constitutes a guard provided with click webs and an upper guard arm. The click webs of each joint element in form of an inner and outer corner element are clickway connected to expansion channel walls of lower sections of the longitudinal skirting. Pairs of click webs of the inner corner element and pairs of click webs of the outer corner element are fixed on the same level, corresponding with the level on which a longitudinal gap of the expansion channels is located.

Advantageously, two horizontal longitudinal click webs fixed on different levels

are located in the lower guard part on its inner side, wherein the terminal portion of each of these webs is appropriate down- and upwardly deflected and has an arched tailpiece.

In the solution according to the Present Invention, a longitudinal lower profile arm is attached to a lower output edge of the expansion channel, wherein this arm is archway bended and outwardly deflected.

Due to the solution according to the Present Invention fitting of the skirting system is remarkably simple and does not require any complicated tooling. A click joint of two longitudinal skirting elements makes a disassembly of the skirting, as well as a renewed assembly of it easier, for example in case when it is necessary to replace conductors arranged under the skirting.

A structure of the joint corner elements allows to remove them and afterwards to arrange them once again without necessary change of the position of the outer skirting guard because these elements are fixed from the outside and are clickway connected to the expansion channel walls of the lower skirting section.

According to the tenets and teachings of the Present Invention, a skirting board comprising a base profile and a guard profile is provided. The base profile comprises a receiving portion and a deflecting arm. The guard profile comprises a protruding portion, that interfaces with the receiving portion of the base profile, and a curved portion. The guard profile combines with the base profile to provide at least one open space. Finally, the deflecting arm and the curved portion combine to provide a surface used to finish a corner produced by a floor and a wall.

Other objects and advantages of the Present Invention will be apparent from the following Detailed Discussion of Exemplary Embodiments Of The Present Invention, with reference to the Figures and Claims, attached hereto and disclosed herein.

### BRIEF DESCRIPTION OF THE DRAWINGS

30

5

10

15

20

25

In the interest of enabling one of skill in the art to practice the Present Invention, exemplary embodiments are illustrated and described. For clarity and

brevity, details apparent to those of skill in the art without undue experimentation are generally omitted from the Figures and Description, in which:

Figure 1 illustrates a perspective view of a skirting board, manufactured in accordance with tenets and teachings of the Present Invention;

Figure 2 illustrates a cross-sectional view of a base profile of the skirting board of FIG. 1;

Figure 3 illustrates a cross-sectional view of the skirting board of FIG. 1, in a preferred setting;

Figure 4 illustrates a cross-sectional view of a guard profile of the skirting board of FIG. 1;

Figure 5 illustrates a cross-sectional view of the skirting board of FIG. 1, disposed in a "snap fit" relationship;

Figure 6 illustrates a perspective view of an inward-projecting endcap of the skirting board of FIG. 1; and

Figure 7 illustrates a perspective view of an outward-projecting endcap of the skirting board of FIG. 1.

## DETAILED DESCRIPTION OF THE EXEMPLARY EMBODIMENTS

20

25

30

5

10

15

The Present Invention is generally discussed, concentrated and directed to a skirting board for use as a baseboard unit. More specifically, the skirting board comprises, *inter alia*, two portions which combine to provide an aesthetic and utilitarian skirting board. However, other uses will be apparent from the tenets and teachings discussed therein. The Present Invention will be better understood from the following Detailed Description Of The Exemplary Embodiments with reference to the attached Figures, wherein like reference numerals and characters are intended to refer to the like parts, and by reference to the following Claims. Further, all specifics of the various embodiments of the Present Invention are neither illustrated in the Figures nor addressed in this discussion, as, in some cases, the general operation of such embodiments is currently known in the art.

FIG. 1 illustrates a perspective view of one embodiment of the skirting board of the Present Invention. Referring to FIG. 1, skirting board 10 comprises base

profile 12, guard profile 14, inward-projecting endcap 16 and outward-projecting endcap 18.

5

10

15

20

25

FIG. 2 illustrates a close up cross-sectional view of base profile 12 of skirting board 10 of the Present Invention. Referring to FIG. 2, base profile 12 is illustrated as comprising generally trapezoidal shaped receiving portion 20 and outwardlydeflecting arm 22. As illustrated in FIG. 2, generally trapezoidal shaped receiving portion 20 is open at one end. It is through this end that receiving portion 20 is adapted to receive a predetermined portion of guard profile 14. Although receiving portion 20 of base profile 12 of skirting board 10 is shown as having a generally trapezoidal shape, it is contemplated that alternative shapes may be utilized. The generally trapezoidal shape of the embodiment of base profile 12 illustrated in FIG. 2 was selected, inter alia, because the arrangement would provide for an adequate "snap fit" configuration between guard profile 14 into base profile 12 (a "snap fit" configuration allows for guard profile 14 to removably and securely fit within base profile 12, in the manner disclosed herein). Thus, it becomes apparent that guard profile 14 must comprise a shape that can be adapted to fit within base profile 12. Reception of guard profile 14 is preferably secured in place through the use of first oblique surface 24 and second oblique surface 26. Thus, it also becomes apparent that, due to the "snap fit" configuration outlined above, the material of which base profile 12 is comprised be a sturdy, yet resilient material. Other characteristics include lightweight, paintable/stainable (for aesthetic purposes) and flexible and may include such materials as, for example, molded or hand plastics, polyvinyl chloride, fiberglass, cellulose materials, acrylonatrile butadeine styrene or any other similar type of rigid, strong composite, alloy or polymer. The interaction of guard profile 14 and base profile 12 will be discussed in more detail herein.

Back side 28 of receiving portion 20 is preferably the part of base profile 12 of skirting board 10 that abuts the lower portion of a wall or other structure. Base profile 12 may be secured to the wall or other structure through the use of a variety of devices and media, such as, for example, glue or any other similar adhesive medium, screws or any other similar affixing device, etc. One embodiment of base profile 12 as attached to structure 30 is illustrated in FIG. 3. In FIG. 3, base profile 12 is illustrated as being secured to structure though the use of screw 32.

Returning FIG. 2, outer end 34 of arm 22 is illustrated. Outer arm 30 is illustrated as being disposed in a manner such as to generally sweep away from receiving portion 20 of base profile 12. Outer end 34 is the portion of base profile 12 that will, upon completion of the installation of skirting board 10, be visible to members of the public. As a result, outer end 34 may possess some aesthetic characteristics. Finally, disposed on arm 22 is ledge 36. Preferably, ledge 36 is shaped to provide a point at which guard profile 14 may rest.

FIG. 4 illustrates a close up cross-sectional view of guard profile 14 of skirting board 10 of the Present Invention. Referring to FIG. 4, guard profile 14 is illustrated as comprising generally curved portion 38, vertical portion 40, first interface protrusion 42 and second interface protrusion 44. Curved portion 38, like outer end 34, is one of the portions of skirting board 10 that is visible to members of the public. In fact, curved portion 38 represents the top portion of skirting board 10. This explains the curvature of curved portion 38 toward structure 30, as illustrated in FIG. 3. As illustrated in FIG. 4, vertical portion 40 may also be bended at an angle for aesthetic reasons. First and second interface protrusions 42, 44 possess outer walls which have bulges 46, 48, respectively, interrelated to first and second oblique surfaces 24, 26 of base profile 12.

10

15

20

25

30

FIG. 5 illustrates an embodiment of skirting board 10 in which guard profile 14 is disposed, in a "snap fit" configuration, within base profile 12. Referring to FIG. 5, while fitting skirting board 10, guard profile 14 is fastened in base profile 12 by means of first and second interface protrusions 42, 44, the outer bulges 46, 48 of which form a "snap fit" connection with first and second oblique surfaces 24, 26 of base profile 12. After assembling skirting board 10, curved portion 38 of guard profile 14 is placed in one line with arm 22 of base profile 12 and becomes its extension.

When completely assembled, both arms 22, 38 define spaces 50, 52, respectively, where the conductors, wires or telephone cables can be arranged. Further, space 66 is defined as the space between first and second interface protrusions 42, 44 of guard profile 14 and first and second oblique surfaces 24, 26 of base profile 12. Conductors, wires or telephone cables may also be arranged in space 66. As can be ascertained from the FIG. 3, while it may appear easier to utilize spaces 52 and 66, space 50 can also be used.

Turning now to FIG. 6, inward-projecting endcap 16 is illustrated. Similar to guard profile 14, inwardly-projecting endcap 16 preferably that portion of skirting board 10 that is disposed at the end of guard profile 14. It is intended to be used when skirting board is installed in a corner, as this provides an appropriate corner interface foil skirting board 10. One distinction between inward-projecting endcap 16 and guard profile 14 is that inward-projecting endcap 16 is shaped to fit completely over base profile 12, rather than a portion thereof. Referring to FIG. 6, inward-projecting endcap 16 comprises covering portion 54, first interface protrusion 56 and second interface protrusion 58. As stated earlier, inward-projecting endcap 16 is intended to completely cover that portion of skirting board 10 that is at the corner of a structure. It is covering portion 54 that fulfills this tenet.

It is intended, as shown in FIG. 6, that inward-projecting endcap 16 fits within to base profile 12 through the use of first and second interface protrusions 56, 58. Preferably, first and second interface protrusions 56, 58 of inward-projecting endcap 16 act in this same capacity as first and second interface portions 42, 44 of guard profile 14.

10

15

20

25

Conversely, FIG. 7 illustrates outward-projecting endcap 18, which is intended to be used when skirting board 10 arrives at an inverted corner (*i.e.*, a "wrap around" corner). To this end, outward-projecting endcap 18 is, essentially, an inverted version of inward-projecting endcap 16. Thus, outward-projecting endcap 18 possesses covering portion 60, first interface protrusion 62 and second interface protrusion 64.

While the Present Invention has been particularly illustrated and described with reference to the particular embodiments thereof, it will be understood by those skilled in the art that various changes in form and detail may be made therein without departing from the spirit and scope of the Present Invention. The scope of the Present Invention is intended to be defined by the following claims as they would be understood by one of ordinary skill in the art with appropriate reference to the specification, including the drawings, as warranted.

### <u>CLAIMS</u>

5

10

20

25

30

#### What is Claimed Is:

1. A skirting board comprising:

a base profile, the base profile comprising a receiving portion and a deflecting arm; and

a guard profile, the guard profile comprising a protruding portion that interfaces with the receiving portion of the base profile and a curved portion;

wherein the guard profile combines with the base profile to provide at least one open space; and

wherein the deflecting arm and the curved portion combine to provide a surface used to finish a corner produced by a floor and a wall.

- 15 2. The skirting board of Claim 1, wherein the receiving portion comprises at least one surface adapted to receive the guard profile.
  - 3. The skirting board of Claim 2, wherein the protruding portion comprises at least one interface portion adapted to interface with one oblique surface.
  - 4. The skirting board of claim 3, wherein the open space is adapted to receive a cable.
  - 5. The skirting board of Claim 3, wherein the base profile further comprises a plurality of openings, for attachment of the base profile to the wall.
    - 6. A skirting board comprising an open base profile and fastened in it by means of two webs guard profile, wherein the guard profile is provided with a long arm and short arm being bended and archway connected with it, and an open base profile is trapezial shaped in cross-sectional view, wherein the profile has narrowing at the outer edge being limited with two oblique surfaces, and an outwardly deflected arm, whereas the long arm of the guard profile is placed in one line with the arm of the profile and is its extension, wherein the long arm is provided on the inner side

with two deviated settlement webs, having bulges on the outer walls, interrelated to the shaped edges of the profile.

7. The skirting board of Claim 1, wherein the arm of the base profile is swept out at its outer end.

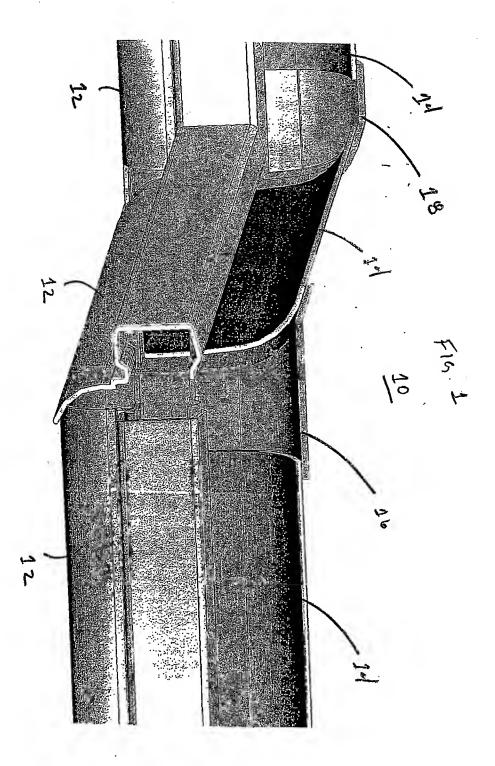
10

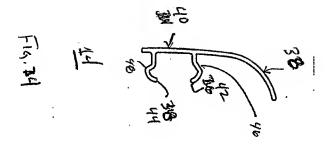
15

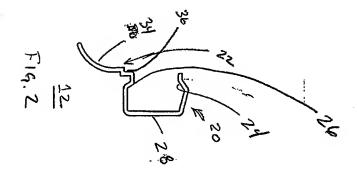
20

25

- 8. The skirting board of Claim 1, wherein the base profile is provided with a series of ports.
- 9. A skirting system and more particularly a skirting board system, comprising a longitudinal skirting and joint elements, wherein the longitudinal skirting consists of two separately connected longitudinal elements, and the joint elements are provided on the inner side with projections, characterized in that a lower section having an expansion channel and a lower profile arm is one of the longitudinal elements of the skirting, and a guard provided with click webs and an upper guard arm is the second longitudinal element, as well as that the click webs of each joint element in form of an inner corner element and of an outer corner element are clickway connected to the walls of expansion channels of lower sections of the longitudinal skirting, wherein pairs of horizontally located click webs of the inner corner element and pairs of horizontally located click webs of the outer corner element are fixed on the same level, corresponding with the level on which a longitudinal gap of the expansion channel is located.
- 10. The skirting system of Claim 9, characterized in that two horizontal longitudinal click webs located in the lower part of a guard on its inner side, are fixed on different levels, wherein each of these webs is in the terminal part appropriate downwardly- and upwardly-deflected and has an arched tailpiece.
- 11. The skirting system of Claim 9, characterized in that the longitudinal lower profile arm is attached to a lower output edge of the expansion channel.
  - 12. The skirting system of Claim 11, characterized in that the arm is archway bended and outwardly deflected.







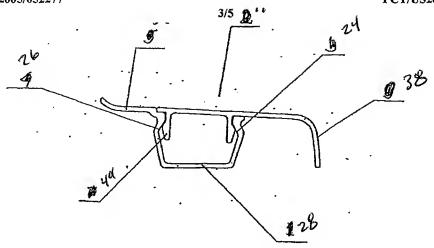


Fig. KS

